

Listing of All Claims

1. (Currently amended) A method of wireless communication of digital data comprising:
providing a mobile unit comprising an accessory device coupled to a wireless telephone handset and having operable to communicate in a plurality of alternative modes of digital wireless communication, including at least one packet data mode and a voice mode for establishing a call over a voice channel;
operating the mobile unit to assess at least a selected characteristic of each of the alternative modes;
based on the assessment, determining a preferred mode; and
if the preferred mode is the voice mode, transmitting data via the preferred voice mode without significantly interrupting human speech communications over the same voice channel call.
- 2.-4. (Canceled)
5. (Original) The method of claim 1 wherein the selected characteristic is selected from a group of characteristics comprising return signal strength, cost, available bandwidth, transmission speed, User preference, Carrier Preference, data type and Cellular Roaming.
6. (Original) The method of claim 5 wherein the selected characteristic is the result of a function of at least a plurality of the members of the group of characteristics.
7. (Original) The method of claim 1 including transmitting the data to a call center for processing, and receiving from the call center a communication including digital data based on the transmitted data.
8. (Original) The method of claim 7 including operating the mobile unit to receive a geographic location signal, and wherein transmitting the data includes transmitting a message based on the geographic location signal.
9. (Currently amended) The method of claim 8 including receiving location information from the call center responsive to the transmitted message.
10. (Original) The method of claim 9 wherein the received location information is in a form selected from a group of forms comprising: street address, NMEA consisting of dillusion

of precision latitude, longitude, heading, altitude, graphical map image, pseudo range, and geo fencing criteria.

11. (Currently amended) The method of claim 1 wherein the step of transmitting occurs in response to a communication received via the wireless telecommunications network from a location ~~apart~~ remote from the mobile unit.
12. (Currently amended) The method of claim 11 including the mobile unit ~~determine~~ determining its location and transmitting location information in response to the received communication.
13. (Original) The method of claim 1 wherein the step of transmitting includes directing the communication to a second mobile wireless unit.
- 14.-26. (Canceled.)
27. (Currently amended) ~~The system of claim 21 wherein~~ A multi-mode digital wireless communication system comprising:
a call center having a server connected to the Internet and to a wireless telecommunication network;
the call center being operable to communicate with a remote unit via a plurality of modes selected from the group of modes including voice and data calls via the wireless telecommunication network,
wherein the call center is operable to receive location information from the remote unit and to process the location information to generate location information in a second format; and
the call center is further operable to transmit the second format information back to the remote unit.
28. (Canceled.)
29. (Currently amended) The system of claim ~~21~~ 27 wherein the second format is selected from a group of formats including street address, latitude and longitude, graphical map image, user preference, carrier preference, data type and cellular roaming.
30. (Currently amended) The system of claim ~~21~~ 27 wherein the call center is operable to query the remote unit to initiate the remote unit determining its own location, and to transit transmit the location information back to the call center.

31. (New) A method of automatically sending geographic location data from a wireless telephone mobile unit comprising the steps of:

at the mobile unit, receiving an external request to send location data;

responsive to said external request, obtaining location data from a GPS unit coupled to the mobile unit;

determining whether a voice mode is a primary transmission mode for location data transmission;

if a voice mode is the primary transmission mode for location data transmission, determining whether a call is currently active;

if no call is currently active, establishing a voice mode call to a predetermined call center;

converting the location data to a selected format for transmission via the voice mode call;

muting the call and then transmitting the location data in the voice channel to the call center.

32. (New) The method of sending geographic location data from a wireless telephone mobile unit according to claim 31 and further comprising:

receiving acknowledgement from the destination that the location data was received; and,

in response to the acknowledgement, discontinue said muting the voice channel call.

33. (New) The method of sending geographic location data from a wireless telephone mobile unit according to claim 31 wherein the call center is a 911 emergency call receiving center.

34. (New) The method of sending geographic location data from a wireless telephone mobile unit according to claim 31 wherein said muting and transmitting steps are carried out during a mute interval having a maximum duration selected so that it does not impair a conversation on the voice channel, thereby enabling substantially continuous voice contact with the call center while also transmitting the location data.

35. (New) The method of sending geographic location data from a wireless telephone mobile unit according to claim 34 and further comprising:

buffering voice signals generated during said muting interval;

time compressing said buffered voice signals; and

replaying said buffered and compressed voice signals immediately after a conclusion of said muting interval so as to minimize loss of voice information.

36. (New) The method of sending geographic location data from a wireless telephone mobile unit according to claim 31 wherein the external request comprises pressing a button located on the mobile unit.

37. (New) The method of sending geographic location data from a wireless telephone mobile unit according to claim 31 wherein the external request comprises pressing a button located on an accessory unit operatively connected to the mobile unit.

38. (New) The method of sending geographic location data from a wireless telephone mobile unit according to claim 31 wherein the external request comprises a query from an entity located remote from the wireless telephone mobile unit. Page 10, line 18.

39. (New) The method of sending geographic location data from a wireless telephone mobile unit according to claim 38 wherein the query from an entity located remote from the wireless telephone mobile unit is transmitted to the mobile unit via a voice channel call.

40. (New) The method of sending geographic location data from a wireless telephone mobile unit according to claim 38 wherein the query from an entity located remote from the wireless telephone mobile unit is transmitted to the mobile unit via a digital data transmission protocol.

41. (New) The method of sending geographic location data from a wireless telephone mobile unit according to claim 40 wherein the query from an entity located remote from the wireless telephone mobile unit is transmitted to the mobile unit via an Internet Protocol.

42. (New) The method of sending geographic location data from a wireless telephone mobile unit according to claim 38 wherein the entity located remote from the wireless telephone mobile unit comprises a call center.

43. (New) The method of sending geographic location data from a wireless telephone mobile unit according to claim 38 and further comprising, at the call center, determining a signal quality of the voice channel call, and signaling the mobile unit to change transmission mode if the determined signal quality does not meet a predetermined signal quality criterion.

44. (New) A method of automatically sending geographic location data from a wireless telephone mobile unit comprising the steps of:

obtaining location data from a GPS unit attached to the mobile unit;

establishing a voice channel call from the mobile unit to a predetermined call center;

converting the location data to a selected format for transmission via the voice channel call;

muting the call and then transmitting the location data in the voice channel call to the call center.

45. (New) The method of sending geographic location data from a wireless telephone mobile unit according to claim 44 wherein said muting and transmitting steps are carried out during a mute interval having a maximum duration selected so that it does not impair a conversation on the voice channel, thereby enabling substantially continuous voice contact with the call center while simultaneously transmitting the location data via the voice channel.

46. (New) The method of sending geographic location data from a wireless telephone mobile unit according to claim 44 and further comprising, at the call center, requesting updated location data from the mobile unit.

47. (New) The method of sending geographic location data from a wireless telephone mobile unit according to claim 44 and further comprising, at the call center, processing the received location data to determine location-specific information.

48. (New) The method of sending geographic location data from a wireless telephone mobile unit according to claim 47 and wherein the location-specific information comprises at least one of latitude-longitude location, nearest street address, and geographical representation on a map.

49. (New) The method of sending geographic location data from a wireless telephone mobile unit according to claim 47 and further comprising transmitting the determined location-specific information from the call center to the mobile unit over the established voice channel call.

50. (New) The method of sending geographic location data from a wireless telephone mobile unit according to claim 47 and further comprising transmitting the determined location-specific information from the call center to the mobile unit over a separate digital data channel.

51. (New) The method of sending geographic location data from a wireless telephone mobile unit according to claim 47 Further comprising, at the call center, determining a signal quality of the voice channel call at the call center and signaling the mobile unit to change transmission mode if predetermined signal quality criteria are not met.